

REMARKS

Favorable reconsideration of this application is respectfully requested.

Claims 65-91 are pending in this application. Claims 65-66, 73-74, 80-81, and 87 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. patent application publication 2001/0014836 A1 to Tamaki et al. (herein "Tamaki"). Claims 67-72, 75-79, 82-86, and 88-91 were rejected under 35 U.S.C. § 103(a) as unpatentable over Tamaki in view of U.S. patent 5,539,652 to Tegethoff.

Addressing the above-noted rejections, those rejections are traversed by the present response.

Initially, applicants note each of the independent claims is amended by the present response to clarify features recited therein. Specifically, independent Claim 65 now clarifies the assembly information storage configured to store assembly information "for a plurality of assemblies". Independent Claim 65 also clarifies the parts information retrieving device can retrieve other parts information from said parts information storage "for other parts having a function comparable to a function of said parts corresponding to said parts information". The features clarified in the claims are believed to be clear from the original specification, see for example page 11, line 25 to page 12, line 6, and page 13, lines 1-11. Further, the features clarified in the claims are believed to clearly distinguish over the applied art.

The claims recite an assembly information storage storing information about a plurality of assemblies of plural parts, which as a non-limiting example discussed in the present specification may be circuit boards, and information of parts included in the assemblies, including names of the parts utilized in the assemblies.

Further, a parts information storage stores parts information including functions of the parts. In the claimed invention, information about the names, etc. of parts constituting an assembly, such as an electronic board, is obtained on the basis of input information

identifying the circuit board. Then, information about the functions, etc. of the parts forming the circuit board is obtained based on the information about the names, etc. of the parts.

Further, parts information obtained corresponding to information of parts on the circuit board can be replaced with information about other parts, having comparable functions. Thereby, replaced parts information can be generated and then stored. The features as discussed above are now clarified in the claims and are believed to clearly distinguish over the applied art.

As shown for example in Figures 1 and 4 in the present specification, a Resource database DB1 can store assembly information of parts in an assembly and names of the parts. A parts information storage, such as Approved Parts DB in Figure 1, can store information including functions of parts corresponding to the parts information. Further, the resource parts list creating/editing unit 3 can retrieve parts information from the Resource DB1 and Approved Parts DB2 and can replace the parts information corresponding with the assembly information with other parts information, for example for other parts having a comparable function as parts in the retrieved assembly, and can store that replaced parts information in a memory.

The features recited in the claims are believed to clearly distinguish over the applied art.

Tamaki is directed to a production system that can access a parts list storage section 2 for storing parts list information and a parts stock storage section 4 for indicating a stock of parts. Tamaki goes on to note the use of a data storage unit 10, a superfluous parts adjusting unit 112, and a deficient parts adjusting unit 111. However, such teachings in Tamaki merely disclose an operation that can ensure that desired parts are in stock.

Tamaki is not at all directed to a system for creating and/or editing structured parts list information. Instead Tamaki is directed to a manufacturing system that can ensure that a list

of required parts is adequately stocked, and determine whether any parts are deficient or superfluous. Such a structure in Tamaki differs from the claims as currently written.

Tamaki discloses a parts list storage section 2, but Tamaki does not disclose or suggest that storage element 2 stores information of a plurality of different assemblies including parts, and information of a name of the parts, rather than just individual parts.

One statement noted in the Office Action for maintaining the rejection with respect to the above-noted features is that the previously recited claims did not necessarily recite “different assemblies”.¹

In reply to that position in the Office Action applicants note the claims are amended to clarify storing information of “a plurality of different assemblies”. Clearly that feature distinguishes over Tamaki.

Tamaki also discloses a parts-in stock storage section 4 that is merely a listing of parts in storage and has no relation to the claim features.

Tamaki also clearly fails to teach or suggest the “parts information retrieving device” or “assembly information update device” recited in the claims.

According to the claimed features, different parts information is retrieved. The first piece of information that is retrieved is assembly information. As a non-limiting example discussed in the present specification, an assembly information storage can store information directed to previously designed electronic circuit boards and known electronic circuit boards.² The second piece of information retrieved is parts attribute information. For example such information can include information of parts such as a parts identification, function, name and manufacture, shape, prospect, price, and/or approval data, and as recited in the claims includes *function* information of other components, which is comparable with a function of a

¹ Office Action of October 24, 2006, page 5, lines 3-4.

² See for example the present specification at page 11, line 25 to page 12, line 6.

part presently retrieved.³ Based on those two pieces of information replaced parts information is generated. Such features are clearly not met by Tamaki.

With respect to the above-noted features the outstanding Office Action notes that it would have been obvious that the “required parts” list of Tamaki would include a function of such parts. Applicants traverse that position.

Tamaki is not at all concerned about indicating a function of a part as such information is irrelevant in Tamaki.

The claims recite storing information of a function of a part because in the claims one part can be substituted for another part with a comparable function. Tamaki does not disclose any reason or objective for storing information of a function of a part.

In the claimed features an assembly information storage stores information directed to ***a plurality of assemblies, the assembly information including a name of parts utilized in the assembly***. As an example noted above information directed to previously designed electronic circuit boards and known electronic circuit boards can be stored. The information of those circuit boards include names of the parts therein. Then, in the claimed invention parts information corresponding to the parts ***of the assembly*** is output. As noted above the assembly information can store information of an assembly such as an electronic circuit board; thus, in the claimed invention parts information for the parts that form that electronic circuit board component are then output, by the claimed “parts information storage”. Tamaki does not disclose any similar feature.

In Tamaki the parts list storage section 2 is merely a parts list storage section and does not store information of ***a plurality of assemblies, the assembly information including a name of parts utilized in the assembly***. Further, the parts stock storage section 4 in Tamaki merely indicates a stock of parts. In Tamaki if a part is not stocked, no information of that

³ See for example the present specification at page 13, lines 1-11.

part would appear to be provided. Thus, Tamaki clearly does not output *parts attribute information including functions of parts corresponding to said parts information*, as required in the claims.

Moreover, even if such elements in Tamaki correspond to the claimed features, which applicants dispute, Tamaki does not disclose or suggest creating replaced parts information based on information in the parts list storage section 2 and information the parts stock storage section 4.

In such ways, the claims as currently written clearly distinguish over Tamaki.

Further, with respect to the further rejection based on Tamaki in view of Tegethoff, that rejection is traversed by the present response.

Tegethoff is directed to a method for manufacturing test simulation in electronic circuit design and relates to a tradeoff between productivity and design property.

The device disclosed by Tegethoff has no relation whatsoever to the device of Tamaki. Tamaki as noted above is directed to a system to ensure that parts are adequately stocked. Tegethoff is not directed to any type of such system and thus has no relevance whatsoever to the teachings in Tamaki.

The motivation set forth in the Office Action to combine the teachings in Tegethoff relative to those of Tamaki is also traversed. More specifically, the Office Action states the teachings of prediction concerning operation, simulation, etc. in Tegethoff could be applied to the teachings in Tamaki "because early prediction of manufacturing behavior drives design changes which optimize the product's manufacturability and testability, thus improving product quality and reducing cost and utilizing a parts list would help facilitate this prediction. See column 6 of Tegethoff".⁴

⁴ Office Action of October 24, 2006, bottom of page 6.

The above-noted basis for the outstanding rejection is believed to be clearly improper as Tamaki is not directed to a device that would have any benefit from “driving design changes”. Tamaki is clearly directed to a device utilized well *after any* type of design is implemented as Tamaki is directed to a device to ensure that parts are adequately stocked; which clearly takes place well *after any* design is implemented. The test simulation in electronic circuit design in Tegethoff has no relevance whatsoever to such a system as in Tamaki. Further, what the basis for the outstanding rejection has not even considered or addressed is why the noted teachings in Tegethoff would be relative to Tamaki as Tamaki is not directed to any “prediction concerning operation, simulation, etc.”.

In addressing the above-noted comments as to why one of ordinary skill in the art would not combine the teachings of Tamaki and Tegethoff, the outstanding Office Action recognizes that for a proper combination of teachings the prior art reference must either be in the field of applicants’ endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicants was concerned, in order to be relied upon as a basis for a rejection of the claimed invention.⁵

After making that statement, however, the Office Action does not indicate at all how Tegethoff and Tamaki are related, or how they are directed to solving a particular problem.

Applicants submit Tamaki and Tegethoff are not in the same field of endeavor and are not directed to solving a same problem, and in particular the references are not directed to solving the same problem as in the claimed invention.

Moreover, the outstanding rejection merely repeats Tegethoff allowing early prediction of manufacturing behavior drive design changes. However, the outstanding rejection still has not addressed why one of ordinary skill in the art would simulate electronic

⁵ Office Action of October 24, 2006, the bottom of page 16.

circuit design such as taught by Tegethoff in the system of Tamaki that ensures the parts are adequately stocked.

In such ways, applicants respectfully submit the further combination of teachings of Tamaki in view of Tegethoff is traversed by the present response.

In view of the foregoing comments applicants respectfully submit the claims as currently written clearly distinguish over the applied art.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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